

09-16-05

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**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Mauldin, Sidney Wayne

Serial No.: 10 / 750,108

Group Art: 3672

Filed: December 31, 2003

Examiner: Tsay, Frank

For: Minimal Resistance Scallop for a Well Perforating Device

**Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450**

**RESPONSE TO OFFICE ACTION**

TO THE ASSISTANT COMMISSIONER FOR PATENTS

SIR:

The following comments are submitted in response to the Office Action dated May 16, 2005. A one month extension of time was filed. On August 24, 2005 the Primary Examiner, Frank Tsay, was called to request an interview and to give notice of the issues to be discussed. The issues as quickly identified by Applicant were that Walker and the other patents all had housings with multiple recesses as would almost all

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**CERTIFICATION UNDER 37 C.F.R. 1.10**

I hereby certify that this correspondence and the documents referred to as attached therein are being deposited with the United States Postal Service on this date September 15, 2005, in an envelope as "Express Mail Post Office to Addressee," mailing Label Number EQ 104663025 US, addressed to the: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: 9-15-05

Brian E. Powley

other perforating guns and related patents. But that would not be a reason to deny Applicant for also having multiple recesses. Applicant pointed out that both of his independent claims had means for language in addition to the elements listed by the Primary Examiner and that this also addressed the issue of whether there was special functional significance. The Primary Examiner requested the response in writing. The issues presented by the Primary Examiner in the Office Action are more detailed and will be discussed in the order presented in the Office Action.

### **35 USC § 102**

The Office Action indicates that Walker anticipates claims 1,3, 5, 8, 10 and 12 of the present invention as Walker has a body member, hole penetration areas, shaped charge, arched geometry in said hole penetration areas with a longitudinal flat area at its bottom in Figs. 5 and 7, and a radius shape in Fig. 9.

While the Applicant concedes that these are elements of Applicant's claims, the Applicant's independent claims have claim limitation language that would make the cited patent to not anticipate the present invention. Claims 1 and 8 of the present invention have means to provide additional strength to further reduce the thickness language. As this has nothing to do with the Walker patent which is to reduce debris and this limiting language prevents Walker from anticipating the present invention.

### **35 USC § 103**

The Office Action then indicates that the present invention does add the element of the hole penetration areas being elliptical in the remaining claims of 2, 4, 6, 7, 9, 13 and 14 but that these claims are unpatentable as they are obvious to a person of ordinary

skill in the art and that a mere change in shape without functional significance is not patentable.

The argument above that the claim limitation language would also apply to the dependent elliptical claims. In addition, as to obviousness, there is nothing in Walker about using the elements for the purpose of the present invention. The Walker patent was to reduce the hole size in the body member and reduce debris that would fall down the wellbore. There is nothing in the Walker patent about using the arched geometry to increase the strength of the hole penetration area to allow for lower thickness and therefore improved penetration and larger perforation hole size in the resulting perforation.

The Applicant is the principal in a perforating gun manufacturing company that sells to multiple wireline companies. Applicant does not know of any similar invention. The present invention has been well received by the industry, marketed as Ultra-One, and has already become a common gun in the industry with marketing only from word of mouth. Wireline companies such as Halliburton, Computalog and Weatherford are examples of companies that are buying the present invention. Applicant has become aware of attempts to copy by competitors.

To say that the elliptical shape addition was a mere change in shape without functional significance is to ignore the entire purpose of the present invention and the claim limiting language of the independent claims of the present invention.

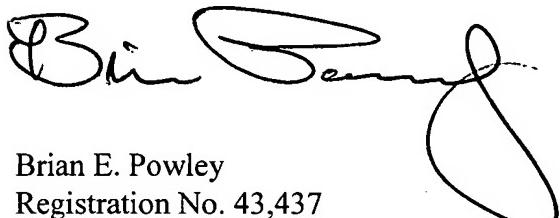
The remaining patents that were considered pertinent as they all teach multiple recesses are no more pertinent as any other patent about perforating guns as basically all

will have multiple recesses. Since basically all perforating guns have multiple recesses that is why Applicant claimed such as his would also. For conservative claims drafting Applicant also claimed a single shot with a single recess.

No additional fee is due.

On the basis of the above response to the Office communication, reconsideration of this application and its early allowance are requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Brian E. Powley".

Brian E. Powley  
Registration No. 43,437  
P.O. Box 720415  
Oklahoma City, OK 73172-0415

Attorney for Applicant